

APR 1977

U.S. POSTAGE PAID
PERMIT no. 320
MENLO PARK, CA. 94025

TO:

Andy Korsak VE3FZK/W6
504 Lakemead Way
Redwood City CA 94062

RETURN REQUESTED:
PAARA P.O. BOX 911
MENLO PARK, CA. 94025



PAARA

vol. 21
1977

Graphs



palo alto
AMATEUR
RADIO ASSN.

MENLO PARK C.D. RADIO CLUB, K6YQT

PRESIDENT	K6FS	STEVE STUNTZ	322-4952
VICE-PRESIDENT	VE3FZK	ANDY KORSAK	366-5228
SECRETARY	WA6LNV	GERRY TUCKER	326-4908
TREASURER	W6BFH	BOB BAUM	325-0495
TRUSTEE OF W6OTX	K6YT	FRED CANHAM	
TRUSTEE OF K6YQT	W6WQD	BOB ALLEN	
PROPERTY CUSTODIAN	W6AIN	ED FAIRBANKS	322-0319

CHAIRMAN:	K6FS	STEVE STUNTZ
MEMBERS:	W6IJP	PAUL THEKAN
	W6NIR	GERRY WAGSTAFFE
	W6RNU	JOHN GOMPERTS
	W6AIN	ED FAIRBANKS
	W6YPM	ERV RASMUSSEN

MEMBERSHIP IN PAARA IS A NON-INFLATIONARY \$4, WHICH INCLUDES THIS ESTEEMED PUBLICATION. SUBSCRIPTIONS TO PAARAGRAPHS WITHOUT MEMBERSHIP IS A LOSS-LEADER AT \$1. BOTH ARE DUE AND PAYABLE IN JANUARY OF EACH YEAR. SEND MONIES TO PAARA, PO BOX 911, MENLO PARK, CA 94025

EDITOR: WB6GRZ TERRY CONBOY
PRODUCTION: K6YT FRED CANHAM
MAILING: W6AIN ED FAIRBANKS
EAST COAST CORRESPONDENT: WA6NCX RICK FERRANTI
COVER GRAPHICS: SUE LINDNER

WB6GRZ 1117 LYONS ST. REDWOOD CITY, CA 94061

YOU WILL BE SORRY IF YOU MISS THE APRIL CLUB MEETING

It will be held on Friday, April Fool's Day (the 1st) at 7:30 PM at the Menlo Recreation Center. Our featured speaker is no joke, however. Tom Mills from National Semiconductor will be there to tell us about video games and the application of microcomputers to amateur radio. Tom is K6LAG, and he is certain to have an interesting presentation.

In addition, there will be a great group of amazingly congenial OM's and perhaps a comely YL or two that you may engage in gay repartee or merely have an eyeball QSO with if one is not so adroit. Further, you will chance upon some epicurean junk food in an ephemeral display. And forget not the profitable PAARA raffle. COME PLEASE!

[illegible]

IF BY CHANCE YOU ARE IN THE POSSESSION OF SOME FREE TIME

on the following Wednesday, April the Sixth, you may find it of great entertainment to come to the PAARA Board of Directors bash at the pre-Elizabethan W6OTX trailer, resplendent with a finial of the finest oxides of iron. Some astonishing decisions are certain to be forthcoming, perhaps concerning Field Day. The time is 7:30.

[illegible]

PAARA COMMUNICATIONS NETWORKS ABOUND IN THE ETHER

Monday night brings you direct from the fabulous Hotel Clyde in the Zipragen Room, after three straight eternities, a curiosity of alarming proportions...namely AM at 2015 PST on 145.24. This motley fellowship is then shortly replaced by the communications mode of the present, FM, which holds forth starting at about 2030 PST on 147.45 MHz. Soon, an orderly net callup procedure will be instituted and possible incentives will be introduced. Be there each week for every exciting new episode!

Saturdays bring forth a hardy crew of QRM fighting operators to do battle on 21.393 if fortuitous propagation is in the offing or on 14.245 MHz if it is not. WIAF will be there to hand out the bad news on poor signals from overpowered transmitters running into carefully tuned attenuating devices. Some success has been had of late, with even W6BFH making himself heard beyond Contra Costa County. Catch all of the fun at 9 AM PST. Find out if there is really life on the East Coast.

A1

The PAARA MEMBERSHIP ROSTER will be updated on a semianual basis, starting now. We have tried to make the information as accurate as possible, but tell us about the inevitable errors and omissions.

.....

SECRET CODE TO CITY ABBREVIATIONS

MP - Menlo Park

LA - Los Altos

PA - Palo Alto

PV - Portola Valley

A - Atherton

RC - Redwood City

W - Woodside

MV - Mountain View

SC - San Carlos

Sv - Sunnyvale

FC - Foster City

Sa - Saratoga

B - Belmont

LAH- Los Altos Hills

(You didn't really think we would put these in alphabetical order, did you?)

.....

Membership Dues may be sent to the PAARA Treasurer at his US address

Bob Baum, W6BFH, 1043 Del Norte Avenue, Menlo Park 94025

or may be sent via the PAARA box at P.O. Box 911, MP, CA 94025.

.....

ACCORDING

\$4

TO

RELIABLE

SOURCES

PAARA

DUES

\$4

ARE the best deal around!!

APRIL 1977 ROSTER PALO ALTO AMATEUR RADIO ASSOCIATION

NAME	CALL	ADDRESS	CITY	ZIP	PHONE
Adachi, Richard R.	W6RVS	2 Coleman Place	MP	94025	
Adams, Milton B.	WB6KOR	152 Hamilton Court	LA	94022	948-3060
Allen, Robert J.	W6WQD	124 Lundy Lane	PA	94306	326-5142
Anderson, Andrew A.	K6EHS	735 Mayview Avenue	PA	94303	325-6318
Baker, Glen	W6UOK	1011 Sevier Avenue	MP	94025	323-3221
Barta, Virgil P.	K6QNH	P.O. Box AC	LA	94022	948-8603
Baum, Robert A.	W6BFH	1043 Del Norte Avenue	MP	94025	325-0497
Byrne, Hugh	WB6DLH	3702 Redwood Circle	PA	94306	493-7144
Camp, Edwin		1161 Cloud Avenue	MP	94025	854-5640
Canham, Fred F.	K6YT	691 Casita Way	LA	94022	948-9238
Carter, E. Finley	K6GT	137 Ash Lane	PV	94025	854-4374
Cary, Charles E.	WA6JFN	940 Arbor Rd., Apt C	MP	94025	323-6401
Chalmers, Douglas W.	WA6DMK	450 Adobe Place	PA	94306	484-2086
Chandler, Frank	WB6QPV	1040 Menlo Oaks Drive	MP	94025	322-7678
Churchill, Paul K.	W6QBY	36 Melanie Lane	A	94025	369-5145
Clark, Ed	W6KJI	3657 Oak Knoll Drive	RC	94062	366-8187
Conboy, Terry A.	WB6GRZ	1117 Lyons Street	RC	94061	364-3107
Cooper, Walter J.	W6CDJ	165 Josselyn Lane	W	94063	851-8029
Crocker, Earl W.	W6VYC	224 Selby Lane	A	94025	366-2790
Curry, Daniel L.	WB6STW	451 Avenue del Ora	RC	94062	365-0944
Dwight, Kenneth W.	WA6NYB	2371 Carmel Drive	PA	94303	327-6659
Edberg, Eric	W6DU	461 Heather Court	LA	94022	968-1748
Fairbanks, Edmund U.	W6AIN	1049 Sonoma Avenue	MP	94025	322-0319
Ferranti, Richard L.	WA6NCX	14 Divinity Av. #17A	Cambridge, MA	02138	354-8464
Finkbeiner, Dick	W6AQL	267 Bonny Street	MV	94040	961-6655
Gomperts, John M.	WB6RNU	641 NW Maxine	Corvallis, OR	97330	
Harper, Dave	WB6JFH	1244 Alameda de las Pulgas	RC	94061	366-9672
Harper, Walter H.		1244 Alameda de las Pulgas	RC	94061	366-9672
Hickman, Earl E.	WA6LUI	3992 Lonesome Pine Road	RC	94061	368-1016
Jenkins, Bill	WB6LML	1551 Woodland, Apt M	PA	94303	321-1483
Kaider, Stephen	K6TV	773 Vista Grande Avenue	LA	94022	961-5198
King, William R.	WA6OFN	875 Sunset Drive	SC	94070	593-2811
Korsak, Andrew J.	VE3FZK	524 Lakemead Way	RC	94062	366-5228
Krawetz, Howard M.	WA6WUI	654 Barnsley Way	SV	94087	739-7930

Lar Rieu, Barry J.	WA6UIM	P.O. Box 752	PA	94303	326-0563
Laxson, Dr. Gerald	WA6OPA	79 Placitas Avenue	MP	94025	321-1225
Lazier, John	W6HBJ	950 Blair Court	A	94025	369-3147
Maciejowski, Tony	WA6KJJ	49 Showers Drive #267	PA	94303	326-0594
McElhinney, W. G.		666 Tennyson	MV	94040	948-7316
McEnnerney, Jack	W6LII	73 Ensenada Road	PA	94301	325-9808
Mersich, Edward P.	WA6RZW	172 Elliot Drive	SC	94070	591-8526
Morton, Robert	WA6SOI	748 San Jude Avenue	MP	94025	326-3662
Narvaez, Bill		327 D Street	PA	94306	
Philpott, Del	WA6YQQ	1602 Kansack Drive	RC	94063	369-4007
Pierce, Edwin L. II	WA6IEN	899 Erickson Lane	Sv	94087	739-0397
Rasmussen, Erwin A.	W6YPM	164 Lowell Street	FC	94404	349-3164
Roche', Curtis H.	K6AL	3890 Louis Road	RC	94062	368-2558
Root, L. Eugene	WB6O00	1340 Hillview Drive	PA	94303	494-2643
Russell, A. W.	W6TFT	2506 Hopkins Avenue	MP	94025	323-2666
Ryan, Ralph B.	WB6NNL	1021 Stanley Way	RC	94062	
Sacks, Larry	WA6SUT	4102 Mackay Drive	PA	94303	323-7362
Schlaman, Gregg	WA6ECQ	20289 Glen Brae Drive	PA	94306	493-7484
Shore, J. Neville Jr.	WA6LVP	4272 Suzanne Drive	Sa	95070	867-9780
Stainback, A. W.	WA6GVP	805 Evergreen	PA	94306	
Starkey, Jerry	WA6LIJ	736 Filip Road	MP	94025	322-6384
Stein, Seymour	WA6ROM	13080 Lorene Court	LA	94022	964-6584
Streib, Fred	W6NA	736 Garland Drive	MV	94040	967-0362
Stuntz, Stephen E.	K6FS	164 Oak Court	PA	94303	326-7846
Talbert, Elmer	W6PFC	2414 Read Avenue	MP	94025	322-4952
Tallmon, W. B.	W6DVB	355 Santa Margarita Avenue	B	94002	593-7320
Thekan, Paul	WA6LJP	335 Rutherford Avenue	MP	94025	326-0112
Thomas, Ken A.	K6GDH	628 Greer Lane	RC	94061	369-4034
Tiffany, W. D.	W6GNX	880 Coleman Avenue	PA	94303	326-7701
Trout, Rachel R.	WA6EQA	50 Fiesta Avenue	MP	94025	324-4524
Wagstaffe, Gerrard	W6NIR	4 Roberts Drive	RC	94063	368-6977
Wallace, Robert E.	K6OL	240 Cervantes Road	MP	94025	325-4670
Wardell, Roy R.	W6EM	500 Ninth Avenue	PV	94025	851-0249
Wardlow, Vance	W6FLE	1260 Bellair Way	MP	94025	369-0698
Webster, E. J.	W6CUN	4055 Manzana Street	MP	94025	854-0803
Wheeler, Robert	K6SEM	868 Elbridge Way	PA	94306	493-0297
Wickman, Fred	WA6BCH	13190 Burke Road	PA	94303	494-6549
Wildner, Ken	K6RB	58 Catalpa Drive	LAH	94022	948-2734
Zeldler, Howard M.	W6NMC	881 Embarcadero Road	A	94025	323-9953
Zobel, Jerome F.	W6ARA	877 Northampton Drive	PA	94303	323-1712
			PA	94303	322-0063

PAARA CALL LETTER DIRECTORY for April 1977

W6AIN Ed F.	WA6GVP Al S.	W6QBY Paul C.
K6AL Curtis R.	W6HBJ John L.	K6QNH Virgil B.
W6AQL Dick F.	WA6IEN Ed P.	WB6QPV Frank C.
W6ARA Jerry Z.	WA6IJP Paul T.	K6RB Ken W.
WA6BCH Fred W.	WB6JFH Dave H.	WB6RNU John G.
W6BFH Bob B.	WA6JFN Charles C.	WA6ROM Sy S.
WA6BQY Dick L.	W6KJI Ed C.	W6RVS Richard A.
W6CDJ Walt C.	WA6KJJ Tony M.	WA6RZW Ed M.
W6CUN Web W.	WB6KOR Milt A.	K6SEM Bob W.
WB6DLH Hugh B.	W6LII Jack M.	WA6SOI Bob M.
WA6DMK Doug C.	WA6LIJ Jerry S.	WB6STW Dan C.
W6DU Eric E.	WB6LML Bill J.	WA6SUT Larry S.
W6DVB Bill T.	WA6LUI Earl H.	W6TFT Al R.
WA6ECQ Gregg S.	WA6LVP Neville S.	K6TV Steve K.
K6EHS Andy A.	W6NA Fred S.	WA6UIM Barry L.
W6EM Roy W.	WA6NCX Rick F.	W6UOK Glen B.
WA6EQA Rachel T.	W6NIR Gerry W.	W6VYC Earl C.
W6FLE Vance W.	WB6NNL Ralph R.	W6WMC Howard Z.
K6FS Steve S.	WA6NYB Ken D.	W6WQD Bob A.
VE3FZK Andy K.	WA6OFN Bill K.	WA6WUI Howard K.
K6GDH Ken T.	K6OL Bob W.	WA6YOQ Del P.
WB6GRZ Terry C.	WB6OOO Gene R.	W6YPM Erv R.
K6GT Finley C.	WA6OPA Doc L.	K6YT Fred C.
W6GNX Tiff T.	W6PFC Elmer T,	

The above list allows you to find an address when you only can remember the call. Most hams do not have last names... some of them have even forgotten the first name that their mother gave them. They can use this list in case they have this problem.

Apologies to those of you whose nickname I don't know or to anyone who is referred to be a name that they are tired of being referred to by. Let us know and it will be fixed in the next list in six months.

Hopefully this list will be longer next time, if not because there will be more members, then because more of you have become licensed in the meantime.

Corrections to WB6GRZ or W6BFH...

COMPUTERS WILL SOON BE A PART OF YOUR RADIO OPERATION

whether you desire them to be or not. Look for the omnipresent microprocessor to soon appear in your SSB transmitter and receiver. RTTY operators are already making great use of them in text editing and code conversion applications. They also do a very nice job of deciphering the good ol' Morse code.

But as new as they may appear to us, the miniature computers of today have been fortold by the great minds of the past, even if they had failed to actually implement the silicon hardware that is now in use. In evidence of this fact, please peruse the text below.

Thy gift, thy tables, are within my brain
 Full characterized with lasting memory,
 Which shall above that idle rank remain
 Beyond all date, even to eternity;
 Or, at least, so long as brain and heart
 Have the faculty by nature to subsist,
 Till each to rased oblivion yield his part
 Of thee, thy record can never be missed.
 That poor retention could not so much hold,
 Nor need I tallies thy dear love to score;
 Therefore to give them from me was I bold,
 To trust those tables that receive thee more.
 To keep an adjunct to remember thee
 Were to import forgetfulness in me.

...William Shakespeare c. 1600
 Sonnet 122

Thanks to Bill, WB6SDE for bringing this to my attention and for sending it to me via the facilities of WR6ACR in glorious Baudot.

+++++

NOT TO BE OUTDONE, ANDY VE3FZK, has informed your executive editor that some frontier research is being done on the 70 cm ATV band of late. Some clever souls have arranged their equipment to allow them to be able to play "PONG" over the air, using the 2 m band for sending the control signal for the second player's "paddle"! No wonder the FCC is trying to get ATV onto the 25 cm band and off of 70 cm. (It probably won't be long until "STARTREK" wars are being fought by microcomputers on the TTY repeater.)

THE MARCH PAARA BOARD OF DIRECTORS MEETING on the ninth was attended by K6FS, WA6LNV, W6BFH, W6NIR, W6AIN, and W6YPM.

Business conducted:

- Ed F. suggested that we get ourselves listed as an affiliated club in future MP Rec. Dept. programs. Gerry will follow up.
- Gerry W. suggested purchasing domestic and foreign callbooks that could in some manner be passed around the membership. Steve will bring this up at the next general meeting to check interest.
- Erv indicated he might come up with an article for PAARA regarding local amateur historical highlights. Contributions in general will be encouraged at the general meeting.
- Steve agreed to dispose of the vertical and the miscellaneous wood that is stored beside the trailer. He will establish an appropriate dollar value.
- New members were voted in.

de Gerry WA6LNV

[illegible]

ONE EACH ITEM FOR SALE by Barry WA6UIM. The incomparable Hallicrafters SX-28 Super Skyrider. Covers .55 to 43 MHz. Asking price is \$70. Barry's phone is 326-2020.

[illegible]

NEWS OF HAMFESTS AND CONVENTIONS AND AUCTIONS AND THE LIKE

The 35th Annual Fresno Hamfest will be held at the Holiday Inn Airport on May 6th through the 8th. It features the usual tech talks (feature subject will be the Viking lander and N6V), swap tables, exhibits, and ARRL/FCC Forum. Ladies programs are also planned and even a wine tasting party will be presented. For all the dope, write Fresno Amateur Radio Club, P.O. Box 783, Fresno CA 93712. Full advance registration will be 13.50 American dollars.

The Marin Amateur Radio Club April meeting will feature an Auction. Items to be sold included some of the equipment from the W6SG club station which has now been replaced by all solid state equipment which is capable of operation on 12 volt batteries for emergency use. They didn't mention the date (but you can certainly find out on WR6ACS or WR6ADC) but the event is at 8 PM at the meeting room of the Cooperative Shopping Center at 71 Tamal Vista Blvd., in Corte Madera.

FCC NEWS AND MISCELLANEOUS GOSSIP

Action on Docket 20777 (Bandwidth Docket). Effective 4/15, standards for purity of emissions are in the rules, replacing Section 97.73. These standards are those of the International Telecommunications Convention of 1959. Specifically, it requires that all spurious emissions be attenuated by 40 dB when transmitting on frequencies below 30 MHz. Further, when utilizing frequencies between 30 and 235 MHz, transmitters with power output below 25 watts are required to attenuate their spurious by 40 dB and transmitters with power output of 25 watts or more are required to attenuate their spurious emission by 60 dB. They mentioned that these standards may be revealed in future proceedings and that the bandwidth aspects of 20777 are still under study and will be the subject of later actions.

(Most HF SSB radios have second harmonic levels of about 35 dB below the carrier power. You will have to add a filter to your transmitter to meet the above restrictions!)

The FCC has deleted the requirement that formal application for a change of address be made within four month of moving. You are still required to do so before commencing operation at your new QTH, however. This is effective on 3/23/77

Also of interest is the FCC proposal to permit the use of automatic identification devices in the land mobile service, which includes the CB realm. Guess what the identification means are... right! Good ol' Morse code, at about 40% modulation with a 750 Hz tone. Comments are due May 17 on this docket (21137).

Don't forget that the ARRL is raising it's dues from \$9 to \$12 for US hams. Life memberships go from \$180 to \$240. This is in effect as of April 1st. So act now and join for a few more years or life while bargain rates are still in effect.

Something else to avoid forgetting... Field Day is the last weekend in June, that's the 25th and 26th. Make sure you keep this pair of days free to come help PAARA keep the CCRC field day plaque for another year. At least one of our forty meter beams will be in operation for the event, so we should improve our totals on that band at least. Hopefully the propagation conditions this years will be a little bit better than last year. Fred Canham, K6YT, is our Field Day Chairman, and he is looking for team captins...volunteers?

WELCOME TO SEVERAL NEW PAARA MEMBERS

Virgil Barta, K6QNH/W7HTF; Frank Chandler, WB6QPV; Howard Krawetz, WA6WUI; Ed Mersich, WA6RZW; Bob Morton, WA6SO1; and Al Stainback, WA6GVP. All their addresses appear in the new membership roster. Say hello to these fine people. Several of them have already made themselves known on our two meter nets.

~~~~~  
THE MEMBERSHIP SURVEY THAT YOUR EXECUTIVE EDITOR UNDERTOOK AT THE MARCH PAARA Meeting showed some interesting results. Twenty-six forms were received, which is about one-third of PAARA's members.

Favorite Band/Mode was a tie between 40 CW and 20 SSB with 12 points each. (Two pts. for favorite band, and one for other often used band).

Second place went to 2 m. FM with 10 points, and third was a tie between 80 CW and 80 SSB with 8 points each. This makes 80 meters the most often used band by the club members surveyed.

Weekly on-the-air time averaged 4.35 hours, varying from 20 (W6YPM) down to zero for several. Nineteen of the respondents were on the air during the 24 hours previous to the meeting.

The average number of magazines subscribed to was 2.12, with OST with 21 votes, by far the most popular. Ham Radio was second with 8 and CQ (surprisingly) in third with 7. Tied for fourth place were 73 and World Radio News (bad news for ol' Wayne). Three took none.

Eighteen listed Ragchewing as one of their operating interests, leading DX with only half that many votes. (Knew there was a lot of hot air in PAARA). In third place was repeaters with 6 and Nets with 5.

Seems like almost everyone (17) had a technical interest in antennas. Everything else was hardly mentioned, with a three way tie between Computers, RTTY, and Microwave with only 3 votes each.

Of those surveyed, 22 were PAARA members, and 6 were EMARC'ers as well. Other clubs represented were Foothills, San Carlos, San Mateo, and SIRARC. Two repeater groups, WR6ACS and WR6AFP were also mentioned. Several also belonged to clubs at their place of business (EIMAC, Farinon, and Lenkurt).

Looks like a fairly active group, with both a wide diversity of interests but at the same time, we have some things in common. The only thing to wonder about is the other two-thirds of the members who were not at the meeting, or who didn't get a chance to fill out the form. What can we do to attract the rest of the group to our meetings? Members come and go, but most of them don't come at all!

# THE NEW, IMPROVED 'ORIGINAL BRIDGE'!



Reads forward power  
and SWR  
simultaneously.  
Handles full legal limit.  
Usable 3 thru 150 Mhz.  
Small enough for  
mobile use.

**\$21.95**

(ADD \$1.50 FOR POSTAGE)



40,000 SQ. FT. OF ELECTRONIC PARTS,  
COMPONENTS, TUBES AND ACCESSORIES.

- ANTENNAS • NEW SERVICE DEPT
- HAM GEAR • ACUSTIC SOUND DEMONSTRATION ROOM
- CITIZEN'S BAND • COMPLETE STEREO HI-FI GERT
- COMMERCIAL AND INDUSTRIAL PARTS SUPPLY
- BANKAMERICARD • FIRST NATIONAL • MASTERCARD

1000 SO. BASCOM AVE.  
SAN JOSE, CA 95128  
408-998-5900

P.O. BOX 4000, SAN JOSE, CA 95150